



Pork Shoulder Wound Packing Model Guide



Iowa Department of Public Health
Bureau of Emergency and Trauma Services

Wound Packing Model

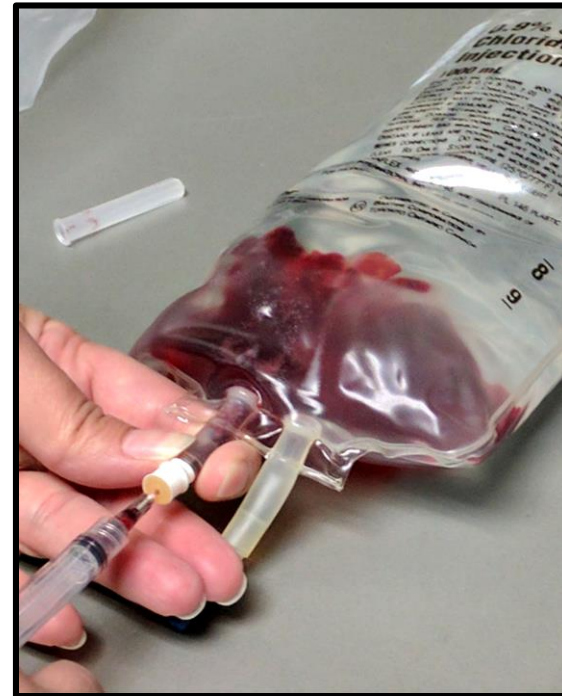
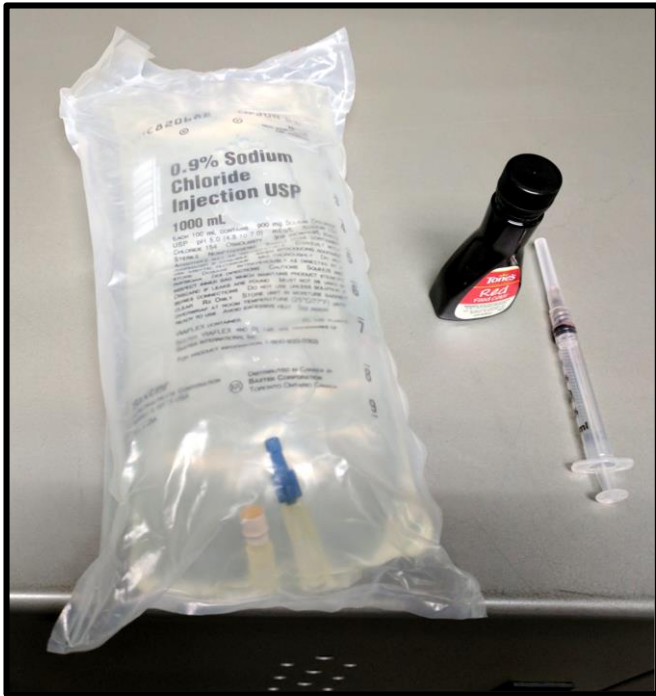
- The presentation is intended to provide step-by-step directions for making wound packing models from bone-in skin-on pork shoulders.
- The pork shoulder models are intended to be a single use device.
- The products and materials used in this presentation are for demonstration purposes only. IDPH does not endorse any manufacturer or brand of product or material.

Materials List

- Pork shoulder (thawed bone-in skin-on was used)
- IV fluid, IV tubing (macro drip set), syringe, and food coloring (liquid food coloring works better than gel).
- Cutting device-pocket knife or scalpel.
- Burrowing device-A knife sharpening steel works well; screw drivers or an awl may be good alternatives
- Mechanism to secure the tubing-suture kits, upholstery needle and thread were used in the demonstration.
- Blue jeans or other cloth to cover the “leg”
- General materials-gloves, disinfecting wipes, trash bags, trays to hold the pork shoulder, and plastic table/floor coverings



Add food Coloring to the IV fluid



3mL of food coloring to a liter bag provides a good red color with minimal residual staining from the fluid.

Create the Wound

- Feel the pork shoulder to find the bone.
- Make an incision in the meat about 2-3 inches long and 2-3 inches deep above a bony area, but not over the joint.
- Be conservative on the initial wound size. The wound will expand as it is repeatedly packed.
- The wound shouldn't be "surgical". Jagged edges are appropriate. A pocket knife works well for this.



Create the Wound

- Using a long straight tool, burrow a hole from the side of the meat to the wound.
- Ensure the burrow hole angles down to the wound so fluid will pool in the bottom of the wound.
- Ensure the burrow hole is large and straight. The meat will “collapse” some once the tool is removed.



Create the Wound

- Shorter burrow holes make it easier to thread the IV tubing through the meat.
- It may be necessary to use a finger to sufficiently stretch the burrow hole to allow for tube placement.



Making it “Bleed”

- Spike the IV bag of colored fluid and fill the IV line.
- Be sure to clamp the IV line to stop the flow of fluid.
- Cut off the end hub of the tubing. Ensure 6-8 inches of tubing with no connectors or ports. This is the section that will be inserted into the meat.



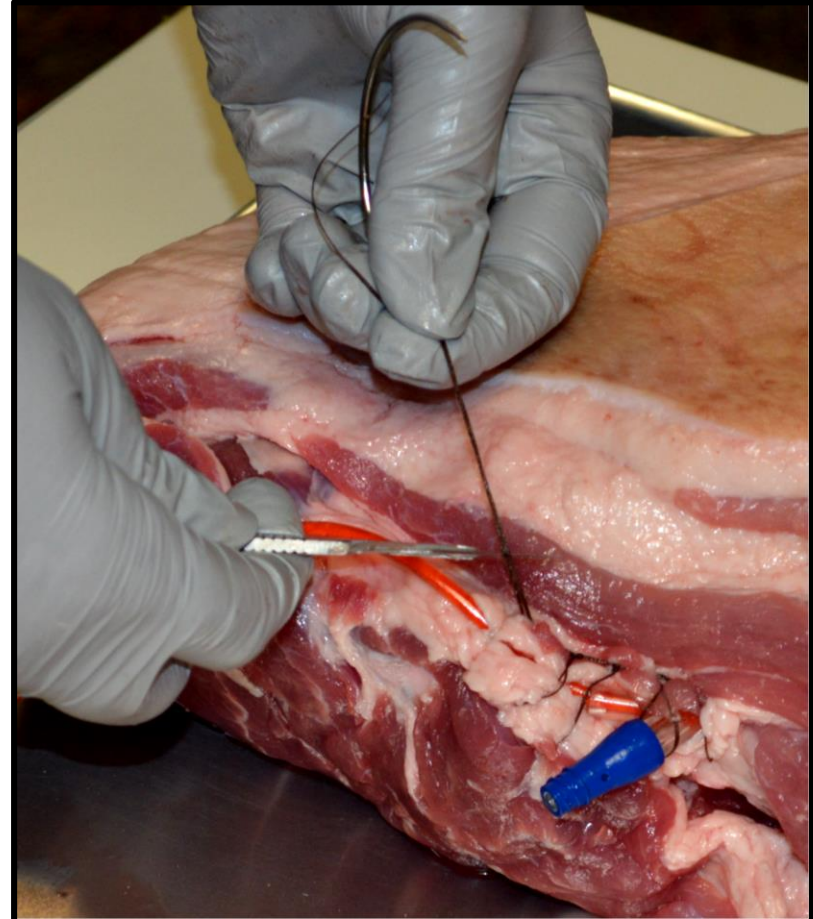
Making it “Bleed”

- Insert the cut end of the IV tubing through the meat to the wound pocket.
- The burrowing tool or fingers may be used as a guide if the tubing curls.
- Once inserted, check placement of the tube. Pork fat may accumulate at the end of the tube during insertion. Squeezing the IV bag (when the line is open) will dislodge material from the tube.
- The end of the tube should be just inside the wound allowing participants to stop the bleeding when the tube is sufficiently compressed.



Making it “Bleed”

- Once the tubing is in the desired position, secure the tubing.
- This is an important step, don't skip it! If the line is not secured, it will dislodge when the shoulder is dressed and as the wound is packed.
- Secure several inches of line and an access port if one is available.



Dressing the “Leg”

- Place the pork shoulder into a pair of jeans, pants or other clothing.
- Shake the pork shoulder into the pants in the same way a pillow is shaken into a pillowcase. This helps settle the shoulder deep in the garment and provides a realistic look and feel.
- For reference: jeans sizes in the demo models ranged from boys 14 husky to men’s 30” waist.



Dressing the “Leg”

- Once the “leg” is in the pants, feel for the wound under the clothing.
- Using a knife, cut a small slit above the wound. The first person at the station will be able to expose the wound.
- Place food coloring on the pants and wound for realism.
- Test the flow of fluid/blood to the wound to ensure everything is working appropriately.



Wound Packing Station

- Participants can see the effectiveness of their wound packing. Effective packing and pressure will stop the flow of fluid. This can be witnessed by watching the IV fluid drip chamber as direct pressure is applied to a well packed wound.



Wound Packing Station

- Be cautious of placing plastic on the floors. It makes for a slippery environment. The jeans/clothing do a good job of soaking up most/all of the fluid. Any residual fluid was captured in the trays.
- These wounds have a realistic look and feel, ensure participants are prepared for the realism.



Questions

- If you have questions regarding building a pork shoulder wound packing model, please contact:
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